

Ethics of Nuclear Weapons and National Security Intelligence

Michael Andregg, University of St. Thomas in St. Paul, MN, USA, mmandregg@stthomas.edu

for Presentation to the International Ethics Section of the ISA, San Francisco, April 6, 2013

Introduction

From the beginning of the nuclear age there have been fears that we may have invented a weapon that will destroy us all. J. Robert Oppenheimer, who helped build the first fission bombs, commented often on this (1). Albert Einstein, whose letter to then President Franklin Roosevelt helped convince him to fund them, talked about the imperative to seek peace and new ways of thinking about everything as he neared death (2). Bertrand Russell coauthored a Manifesto with Einstein (and nine others) to warn the world that everything had changed (3). Yet thousands of thoughtful people still felt compelled by the urgencies of World War II to make nuclear weapons and to use two of them against other human beings. To end the war, they said to each other, and perhaps to show the Soviets who would be the big dog following.

But then what?

Another arms race had begun, and bigger, badder WMDs would be developed soon.

As soon as more than one nation had nuclear weapons, some strategy had to be conceived for their use. Mutual Assured Destruction was the main result, and millions learned the irony of a “MAD” strategy, where safety was to be assured by capabilities and declared will to destroy human civilization if we were frightened enough by any enemy. Those we terrified produced similar weapons and strategies. Herman Kahn and colleagues wrote books like “Thinking the Unthinkable” (4) to explain this theory to lay publics unanointed by the priesthood of nuclear physicists. Many nominally good people were hired to build thousands of nuclear warheads and delivery systems. Thousands more were trained to use them to blow up half of the world if so ordered. Their reliability was tested relentlessly, to pull the trigger or push the button if so ordered, and our bureaucracies learned how to exclude anyone who might hesitate if their duty called. Our adversaries did the same. We shared the lethal technologies with some allies, as did they. And retired nuclear physicists started a magazine, called the Bulletin of the Atomic Scientists, to warn people basically not to do what they had done.

Later we invented modern biological weapons, ever so secretly, and a new community of biologists and doctors learned to sin like physicists¹. And chemical weapons were ‘improved’ by development of modern, binary nerve agents, much more effective than old mustard gas, Zyklon B and such, despite strict prohibitions that were rationalized around. Scientists and intelligentsia pondered how we had wandered into this thicket of moral conundrums. Meanwhile we stumbled on, driven by something. One purpose of this paper is explaining that.

¹ “In some sort of crude sense, which no vulgarity, no humor, no overstatement can quite extinguish, the physicists have known sin; and this is a knowledge they cannot lose.” J. Robert Oppenheimer, in his Arthur D. Little Memorial lecture at MIT of November 25, 1947, “Physics in the Contemporary World.” Biologists have since learned that no matter what “mainstream” biologists proclaim in ethical manifestos, if a government wants to hire someone to work on bioweapons, they will find employees who, once in their top-secret, security cleared cocoons, will do their jobs.

Mutually Assured Destruction (MAD) and the NPT of 1970

This paper assumes the reader has a general awareness of the history of nuclear weapons, of related arms control efforts and of the reasons and rationalizations associated with each. The core will be how and why national security intelligence cultures that study worst case scenarios daily almost inevitably abandon any concept of virtue ethics or deontological frameworks to arrive at utilitarian suicide scenarios like MAD implies. That occurs in the next section.

Here I will highlight two elements of the most important strategic decisions and treaties that seem essential for the educated reader to grasp how so many very intelligent, even brilliant men and some women went from deep commitments to protecting others to equally firm commitments to murder millions should the proper order be received. They still do today. It helps to recognize that weapons of mass destruction were not invented, perfected, built or used by people who were intrinsically evil. WMDs were invented, built and used by people who thought they were doing a good thing for their communities. One key word in this process is “bureaucracy” and another is “propaganda” especially internal propaganda.

Wikipedia tells us that “The strategy of Mutually Assured Destruction and the acronym MAD are due to [John von Neumann](#) (1902–1957), who had a taste for humorous acronyms. ... He was, among other things, the inventor of [game theory](#), a cold war strategist, and chairman of the ICBM Committee until his death in 1957.” Game theory is a branch of mathematics fused with ideas about human behavior, and it is very useful in various areas. It also has two embedded assumptions that are the equivalents of Achilles’ heels.

The first is that people are “rational actors” and will mostly make “rational” decisions (a.k.a. rational according to the mathematician, physicist or economist positing this). This is called the “rational actor assumption.” The problem here is that the concept “rational” varies dramatically across cultures and time, and whatever your concept of rational it often degrades under the intense pressures of international crises (5). Besides which, no matter how nice and rational your king or commanders are today, they can go nuts over time or under pressure, both of which have occurred many times in human history. Statistics assure us that if even a tiny probability exists for general thermonuclear war and the paradigm does not change, then it will eventually occur. What is rational about wiring the world for self-destruction on that day?

The second big assumption in MAD theory is that people make all the relevant decisions in this system. Partly true, but not 100%. Many computers are involved in “decision support” during nuclear crises, because the minutes available for a life-or-death-for-the-world decision are very few. Computers make mistakes even if their programmers have been perfect which they never are. Furthermore many of those machines attached to nuclear systems, early warning, and decision support were made decades ago. More important, bureaucracies decide who sits in missile silos or has their hand on nuclear triggers in submarines and such. Bureaucracies have no morals, and national security bureaucracies in particular are afraid of people with deep objections to war, including nuclear holocaust. So they get rid of such people by forbidding their entry into the cloistered worlds of high security clearances (6). Thus isolated, the morally blind then think that they see brilliantly. Finally, corporations are involved, and they respond to one thing only.

One rational response to a world where hegemony has nuclear weapons and are almost constantly waging wars against somebody (a.k.a. the world today) is for smaller nations to get nuclear weapons of their own to avoid becoming targets. Yet today a vast majority of Americans consider Iran and especially North Korea to be literally insane for seeking nuclear weapons (the latter) or weapons capability (the former). Both have been threatened many times by nuclear powers, yet both are condemned for responding in kind by people who have nuclear weapons of their own they would not give up to get into heaven.

The architect of the policy of “containment” so essential to the ability of the Soviet Union to break up without blowing up was George Kennan of the U.S. State Department. On retirement he contemplated these dilemmas very deeply, and he wrote a forward to another deep thinker’s book called “The Pathologies of Power” (7, 1987). Kennan wrote:

“All of these men [Albert Einstein, Bertrand Russell, General Douglas MacArthur and President Dwight Eisenhower] perceived the suicidal quality of the nuclear weapon and the danger in allowing it to become the basis of defense postures and the object of international competition. All of them spoke with a great sense of urgency. All went to their deaths hoping, surely, that their warnings would not fall on deaf ears and that a new generation of leaders would recognize that we were all living in a world of new political-strategic realities and would draw the necessary conclusions.

Unfortunately, this has not happened. For thirty years past these warning voices have been disregarded in every conceivable respect. There has been no new mindset. There has been no recognition of the revolutionary uniqueness of the weapons of mass destruction, no recognition of their sterility as weapons, no recognition of the dangers of their unlimited development. On the contrary, the nuclear explosive has come to be treated as just another weapon, vastly superior to others, of course, in the capacity for indiscriminate destruction, but subject to the same rules and conventions that had governed conventional weaponry and its uses in past ages. The suicidal quality of these devices has been ignored.”

What Kennan knew but did not write here is that tons of money was being made by bureaucracies and companies building, storing and managing such weapons. Bureaucracies and corporations feed on money not morality. Moral people inside or outside can say whatever they like, but all that talk will have less impact on a bureaucracy or company than budget decisions.

Mindful of such dilemmas, international leaders created a Treaty on the Non-Proliferation of Nuclear Weapons or the NPT (Non-Proliferation Treaty) in 1970 (8). More countries have ratified this treaty (190) than any other arms limitation or disarmament agreement, a testament to its significance. On the other hand, some of the most important nuclear weapons states are not members of the NPT, and the biggest nuclear powers are in clear violation of it. The essential deal was that non-nuclear weapons states would forego building these WMDs in return for help developing nuclear power and a pledge from the nuclear weapons nations to work diligently toward a world without nuclear weapons at all. That part is called Article 6, and we are nowhere near zero nukes 43 years later, which is a big reason why countries like Iran and North Korea are saying forget you pious hypocrites; we’re building weapons or capability too.

The Lens of National Security Intelligence and Worst Case Scenarios

National security intelligence organizations do many things, but job #1 is always protecting the government that sponsors them against enemies foreign and domestic, however that may be phrased. This requires sober assessments of the worst things that could happen to a country or a government. History provides many examples of governments that are not here anymore (and even a few whole peoples) because intelligence systems failed at this main task.

Focusing attention every day on the very worst things people can do to each other puts a strain on anyone. Topics can be depressing, responsibilities are great, and workloads heavy. No one wants to be surprised by a new weapon or enemy. But enemies can be masters of deception, and one thing you can count on is that they will be trying to penetrate your organization. So secrecy is the norm, and half of your security officers may be looking for the spy within (9).

Weapons of mass destruction in general and nuclear weapons in particular raise the possibility that small states, or even an individual angry or ideologically committed man, could wreck great havoc on the nations that security officers are determined to protect. So a common way of preparing or training officers is to study worst case scenarios *ad nauseum*, and to assume that anyone, anyone at all might be a spy with deadly capabilities. That dent's mental tranquility.

An example is the "ticking time bomb" category of moral dilemmas, much used in the training of intelligence officers. A common version goes like this: Assume you have caught a terrorist who has planted a nuclear weapon somewhere in your city. It is set to go off soon, but you have some time to interrogate him or her. Do you torture them to try to find out where the bomb is so that it can be defused?

Extreme cases like that often cause people to throw out rulebooks of restraints on the grounds that all those innocents who might die otherwise deserve to be protected "by any means necessary." This is independent of the utility or disutility of torture as an interrogation technique (it is not very good). When you throw out the rulebook you have thrown out deontological ethics, and much or all of international law (10). Even the meaning of "virtue" can be transformed, as when the virtues of restraint and prudence among warriors are overcome by virtues of "courage" to face "hard choices" where the sacrifice of innocents is too often allowed to serve some allegedly greater good. In fact, all you are left with is law of the jungle or act utilitarian ethics that can be used to justify anything if your scenario is extreme enough.

Further complicating things is the verifiable fact that security clearance systems keep out people so moral they would never agree to keep any secret no matter how vile. When agencies ask you to keep secrets, they don't say only some. Gentle folk who decline to promise to keep every secret, even evil ones, will not be on any analysis team looking for enemies or operations squad waiting for targets to capture or kill. Compartmentalization enables evil especially well.

The people who remain "cleared" will focus on their positive duties to protect their own (colleagues and sponsors, mothers and children, friends and country). All are at risk to WMDs. And "terrorists" with WMDs are alleged to be extra-special scary since they don't wear uniforms and are allegedly as single-minded about killing you as you can become about killing them.

Such environments are extremely conducive to organizational paranoia and a long list of other failures. One of the most frequent concerns I have heard in over 25 years of studying spies has been not to forget the many very good people who enter such systems and work honestly, diligently, and as ethically as they are allowed to serve real goods—like the safety of their countries and their peoples. Such sources are almost always frustrated with dysfunctions in their systems, but remain loyal to the causes that led them to enter the world of espionage. Therefore I will spend some space here reviewing a sampler of their memoirs, both critical and nostalgic.

Because there are hundreds of intelligence agencies on earth, a comparative review is impractical in this space although we have done some for special issues of “Intelligence and National Security” among others (11). So we will focus on the CIA here. We begin with insider memoirs that are critical, followed by memoirs that are mainly supportive, followed by a few scathing critiques from outsiders who took time to really understand their topics.

“Ishmael Jones” (an alias) wrote “The Human Factor: Inside the CIA’s Dysfunctional Intelligence Culture” in 2008, updated 2010, to explain how getting around the bureaucracy was essential to him becoming one of their most productive case officers (12). “Anonymous” (now known to be Michael Scheuer from the Bin Laden desk at CIA) wrote “Imperial Hubris: Why the West is Losing the War on Terror” in 2004 (13) to explain how the bureaucracy frustrated actually getting Osama Bin Laden, their principle target. We have been assured that Bin Laden was actually killed in 2011 (without, I must note, any forensic evidence presented to external critics) but Scheuer maintains that he could have been killed or captured many years earlier. External critics point out that Bin Laden was worth many billions every year to the institutions seeking him so long as he was alive and free. 2004 also brought us “Denial and Deception: An Insider’s View of the CIA from Iran-Contra to 9/11” (14) by Melissa Mahle (a career case officer focused on Middle East nations) to “highlight what is for many, the greatest political scandal of a generation: the failure of the U.S. intelligence community to combat the threat posed by Islamic extremists and prevent the 9/11 attacks.” Her book was redacted while in press by the CIA Publications Review Board, after already reviewed and approved, and Mahle was prevented from giving a speech at a conference on ethics for spies where I met her in 2006. Another career officer who became the Chief of the Moscow station, Burton Gerber, was allowed to speak and coedited a more academic review of dysfunctions and possible fixes in 2005 with Jennifer Sims from Georgetown, “Transforming U.S. Intelligence” (15). Robert Baer, the career CIA officer whom the movie “Syriana” was modeled on, wrote “Sleeping With the Devil: How Washington Sold Our Soul for Saudi Crude” in 2003 (16). As noted before, none of these people are enemies of the US, of the CIA, or of espionage as a profession. They want to improve the profession by injecting some ethics into it, and reducing the pervasive dysfunctions of the organizations they know quite well. As noted earlier (5) it turns out that the bureaucracies are at the very least allergic to genuine ethics if not outright hostile to them (17).

Long before these authors the former Chief of CIA’s Angola Task Force wrote “In Search of Enemies: A CIA Story” in 1978, where he described how the CIA was tasked to destabilize Angola in preparation for the next war (18). And the “first book that the U.S. government ever went to court to censor before publication” (The CIA and the Cult of Intelligence) may have been the most insightful. This was written in 1974 by Vincent Marchetti

(who rose to be executive assistant to the Deputy Director of CIA) and John Marks from the State Department's intelligence bureau (19). Their point was simple but powerful: something in the intelligence world had cult-like qualities, and induced cult-like behaviors among people who stayed there. I will simplify that here by asserting that an obsession with secrecy and deep fears of actual ethics among the bureaucracies are the core dysfunctions that enable all the others.

Now for some more positive memoirs. As one might expect, Directors of agencies have more positive views of their decisions under difficult circumstances and of compromises they "must" make with the political leaders who ultimately are their bosses and control their budgets. George Tenet provides a good example of that genre, in "At the Center of the Storm: My Years at the CIA" published in 2007 (20). He saw little wrong that needs fixing; maybe a tweak or two here and there, despite his most notorious failures, 9/11 and the WMD fiasco in Iraq. William Odom, former Army General and then Director of the National Security Agency saw lots to improve but was still fundamentally supportive of the U.S. intelligence community in "Fixing Intelligence for a More Secure America" in 1997 (21). And two books from 2004 present views on how to improve things from two career CIA officers, William Daugherty who was held hostage in Iran for over a year in 1979-80 ("Executive Secrets: Covert Action and the Presidency," 22) and Arthur Hulnick who served the CIA as both an analyst and an operator for 40 years and before that was an Air Force intelligence officer ("Keeping us Safe: Secret Intelligence and Homeland Security," 23). From 2012 come "The Art of Intelligence: Lessons Learned from a Life in the CIA's Clandestine Service" by Henry A. Crumpton (24) who organized the fantastically successful takedown of Afghanistan by CIA and U.S. Special Forces, and "Hard Measures: How Aggressive CIA Actions After 9/11 Saved American Lives" by Jose A. Rodriguez Jr. (who led the agency's descent into depravity by using torture instead of better methods of interrogation, and seducing 54 other nations on earth to help in various ways, 25).

"Politicization" of intelligence is a recurring problem that all of these authors have seen and many have rebelled against. This basically means when political leaders cause intelligence assessments to be altered to conform to their own desires or prejudices. That can lead to horrible consequences (as when top leaders want to attack someone regardless of facts, or go insane and drive their countries into disaster or destruction in other ways). So all responsible intelligence schools teach analysts to avoid such politicization ... if they can! The core problem is that leaders or their policy staff can often fire the analysts, or just ignore the ones they don't like in favor of those who tell them what they want to hear (the sycophant problem). So I will mention here two exceptional books that try to address politicization, Joshua Rovner's "Fixing the Facts: National Security and the Politics of Intelligence" from 2011 (26) and Robert David Steele's 2000 work, "On Intelligence: Spies and Secrecy in an Open World" (27). Steele was a persistent proponent of better use of open sources, and a critic of bureaucratic idiocies, which earned him many enemies among former Marine and CIA colleagues. As you might infer, politicization and protection of budgets is a big problem everywhere. The informal Dean of positive responses to horrible, complicated problems in this domain is probably Loch Johnson whose 2012 book "National Security Intelligence" should be required reading for all young officers-to-be (28). Johnson is a genuine world expert on oversight, and thinks it works better than I do.

Remember, all of these books cited from 11-26 were written by people with very high security clearances who spent years and usually decades working for U.S. intelligence agencies,

or in Johnson's case for the U.S. Senate Intelligence Oversight Committee (he is now an emeritus professor at the University of Georgia and senior editor of "Intelligence and National Security"). Now a word or two from critics less constrained.

"The CIA: A Forgotten History" by William Blum, 1986, listed U.S. interventions since World War II with an emphasis on covert wars and coups sponsored secretly by the CIA. It is NOT recommended to young agency officers-in-training (29). "The 'Terrorism' Industry" by Edward Herman and Gerry O'Sullivan (1989, 30) lays out how the Western media were coopted into supporting such foreign adventures, and cooperating in cover-ups regarding who was really responsible. "Body of Secrets: Anatomy of the Ultra-Secret National Security Agency" by James Bamford, (2001, 31) showed how the other behemoth of America's now 17 intelligence agencies was involved in such operations. But his book could not show how the NSA would morph after September 11, 2001 into an agency that routinely intercepts and inspects most communications coming into and out of the U.S.A. and a significant fraction of all domestic traffic also. These are split off from telecom company routers and run through supercomputers searching for people saying naughty things. But how would have to wait for a two year Washington Post investigation called "Top Secret America" by its lead author Dana Priest (32). Frank Rich's 2006 expose, "The Greatest Story Ever SOLD: The Decline and Fall of Truth in Bush's America" (33) proves beyond shadow of doubt that the second war against Iraq, begun March 19, 2003, was promoted by flagrantly false and sometime outright fraudulent "intelligence" (making this an international war crime). And finally, another career New York Times reporter and Pulitzer Prize Winner Tim Weiner wrote "Legacy of Ashes: the History of the CIA" in 2007 (34). Taken together, these expose's incinerate the public relations picture of American intelligence which explains why the wall of "national security secrecy" is so essential to the continued budgets of at least the CIA if not the entire U.S. intelligence community which becomes complicit in the murder of innocents when things go really badly. But what about all those good people who enter these dysfunctional systems trying to protect their neighbors from evil abroad?

Well it is very hard on them to be blunt. Not as hard on them as on the people they help to kill, but hard nonetheless. If they retain their consciences, which is difficult if you stay inside too long and use "tradecraft" that has other unhealthy consequences, they suffer astronomic rates of alcoholism and divorce, for example. But this is an essay on the ethics of weapons of mass destruction, so we will return to that focus having established some critical constraints on the institutions that tell U.S. Presidents who to target with nuclear or other "special" weapons.

Iran, Israel, North Korea and the U.S.A. in 2013 as illustrative cases

The hottest issues on America's nuclear security agenda these days are what to do about North Korea (which has a few very primitive nukes, but limited means to deploy them) and Iran (which almost certainly does not have any actual nuclear weapons, and cannot for years, but does have much better missiles than North Korea, and connections with angry people who know how to smuggle things). Regardless of dysfunctions, lack of ethics or any other problems, it will be up to America's intelligence community to inform our national security commands what Iran and North Korea are up to in every respect, and to recommend options for action if asked.

Vastly complicating this is our very close ally Israel, which has many more and much better nuclear weapons and delivery systems than either Iran or North Korea, partly because they

stole the necessary material from America back in 1968 (another story, best left untold here). Israel is also one of the nuclear nations that has not signed the Nuclear Nonproliferation Treaty, so it is harder to determine exactly what their capabilities are. Their intentions are pretty clear – they feel surrounded by enemies and are haunted by the Holocaust (Shoah) so they are determined to avoid another genocide, and have worst cases on their minds all the time. Israel also has one of the highest quality human intelligence organizations in the world in the MOSSAD, which is understandably focused on declared enemies like Iran. We depend on them for much of our human intelligence in that area, which makes America vulnerable to manipulation, a common problem with liaison relationships in intelligence. Iran knows that Israel could turn it into bubbling glass if frightened enough, which probably has something to do with the desire among ‘hard liners’ in Iran for similar weapons. It is MAD squared there.

Iran’s top Ayatollah (and supreme leader) Ali Khamenei, has often said that nuclear weapons are immoral and therefore not allowed by Islamic law. But current President Mahmoud Ahmadinejad foams at the mouth about Israel often enough to scare anyone who listens. Those who live in the “worst case scenario” world must assume that Iran could have nuclear weapons soon even if they don’t now, and that even if the chief preacher says it’s sinful, some generals might have other plans. Plus who knows the future? Worst case analysis assumes worst cases, and WMDs bring out the worst in everyone. We will presume here that you are familiar with the charming reputation of North Korea among its neighbors, and the legacy of dictators leading to the current Kim Jung Un. He may be a breath of fresh air compared to his grandfather and father; we shall see. But it should be noted that third generation dictators tend to be shaky and unpredictable compared with the ones who built their starving nation, perhaps the most brutal police state on earth today. As in each of the other three countries, dear leader Kim must also contend with secret powers behind his throne who can be as evil as anyone publicly visible.

What is a U.S. President to do with this conundrum?

A genuine and certified moral leader, the Nobel Peace Prize winning Rev. Desmond Tutu of South Africa says clearly “We cannot intimidate others into behaving well when we ourselves are misbehaving. Yet that is precisely what nations armed with nuclear weapons hope to do by censuring North Korea for its nuclear tests and sounding alarm bells over Iran’s pursuit of enriched uranium. According to their logic, a select few nations can ensure the security of all by having the capacity to destroy all. Until we overcome this double standard – until we accept that nuclear weapons are abhorrent and a grave danger no matter who possesses them – we are unlikely to make meaningful progress in halting the spread of these monstrous devices, let alone banishing them from national arsenals” (35).

Unfortunately, national security intelligence professionals are notoriously indifferent to what preachers say, no matter how many medals they have. They’re not “cleared” so presumably don’t know much. So we might turn to a former CIA counter-proliferation case officer Valerie Plame Wilson, who wrote on the same day: “Twenty-five years ago, President Reagan laid out a vision for a world without nuclear weapons, and in his first term President Obama boldly picked up that mantle - most famously in his 2009 speech in Prague, where he announced America’s commitment to eliminate all nuclear weapons globally. There is now a unique opportunity for President Obama, in his second term, to follow through on that commitment and set the world’s course to global zero. He can do this by pursuing further reductions to the United States’ and

Russia's massive Cold War arsenals and bringing other key countries to the table for the first multilateral nuclear arms negotiations in history.” The “Global Zero” campaign Ms. Wilson is supporting “includes a letter to the president from approximately 75 former prime ministers, foreign and defense ministers and military commanders; an official declaration recently adopted by the European Parliament in support of Global Zero’s step-by-step plan to eliminate nuclear weapons; and a grassroots petition appealing directly to the president” (36).

So their view is clear – Get rid of the evil things. But could a nation as terrified as Israel ever possibly be persuaded to “get rid of” its most powerful weapons? And what about the U.S.A. which invented them? We can’t put a leash on handguns here, much less WMDs. People love them (many people anyway). There seems to be a genuine paradox at play, where the most powerful are the most reluctant to part with weapons, even while they insist that others around them do. In fact, the most powerful often appear to be the most paranoid as well if you read and listen to what they say. There are few consensuses in this arena, but most observers would agree that if anyone is going to “give up” nuclear weapons, it will have to be everyone, accomplished very slowly, with the most extensive oversight that people can create. The Comprehensive (nuclear) Test Ban Treaty would be a good case to contemplate for guidance on that.

It bears recollection that several countries actually have possessed nuclear weapons yet deliberately got rid of them when wisdom dawned. South Africa had six, or so, and Kazakhstan, Belarus and Ukraine had hundreds each, but were persuaded to turn them over to the Russian Federation as the Soviet Union unravelled. None of those nations was subsequently destroyed.

What is true for nuclear weapons has parallels among chemical and biological weapons. Each is attractive to the worst case mind, and to those who need “enemies” for various reasons. But substantial restraints have been put on all these WMDs when larger publics that sponsored them woke up to the catastrophic consequences should they ever be used. They had to wake up, and they had to penetrate the secrecy barriers that enabled those who need enemies to create and stockpile them. Then they had to defund those projects, because one thing projects all need is money. Remember, bureaucracies and corporations respond far more to money than to any moral logic or words.

Conclusions

Bureaucracies are intrinsically immoral, seek mainly money and power, and intelligence bureaucracies are dramatically immoral because they think they are essential to their countries and governments. That hubris is only sometimes true. Bureaucracies also produce propaganda to justify both their budgets and their missions. Internal propaganda is at least as important as external, to keep employees working hard without excessive reflection. A paradox easily seen by outsiders but invisible to insiders blinded by their security rules and internal propaganda is that intelligence systems would work better if they adopted real moral codes appropriate to professionals and learned how to deal with such constraints prudently. The bureaucracies want obedience, period. Weapons of mass destruction highlight these characteristics vividly because they are so grotesquely indiscriminate, immoral, wasteful, and some would say evil incarnate. Fear of WMDs is used to justify every other bad thing that intelligence agencies do.

All this is prelude to the key questions about nuclear weapons, and we don't want to neglect chemical and biological weapons completely. After reflection it seems the key nuclear questions are: Should anyone have them, and if so when might they be morally used? How do we get from the current condition of proliferation of both weapons and fear? And how do chemical and biological conundrums compare with the nuclear dilemmas?

As George Kennan (among many others) noted, an actual, general thermonuclear war would kill billions of people and end civilization as we know it for sure. Furthermore, their destruction is so indiscriminate and unproportional to most conceivable threats that any use is likely to kill thousands of innocents along with alleged bad guys. So they are NOT just big conventional weapons. Deterring use by others has a strong surface plausibility, but continued proliferation to new and crazier entities like North Korea highlights the statistical reality that if you keep such a system forever someone is going to break the taboo and use them against others.

The paranoid will cling to them obsessively, and they will have a strong retort. Why should they not cling to deterrent nuclear weapons when all the major powers do?

There is exactly one possible moral use for nuclear weapons which is to protect the whole planet from errant asteroids or other threats from off-planet, where a detonation would not risk innocents here or the rapid escalation to general war that most Pentagon war games encounter when they practice "limited" nuclear war scenarios. Is it possible for someone to maintain a modest arsenal for planetary protection without risking the planet itself to partisan feuds?

That is a difficult challenge given the realities of geopolitics and the proven tendency of governments to become corrupt and abandon their ideal functional purposes (37). Furthermore, as Lord Acton noted most eloquently, secret power is especially prone to rapid degeneration into evil forms.² Nuclear weapons bureaucracies are notoriously as secret as any due to the obvious fear that nuclear weapons designs or materials might get into "the wrong hands" which ends up being code for "anyone's hands but our Generals' who are now Emperors of the Universe."

Because of these conundrums a modest movement has arisen to urge governments to go back to the promises of the NPT and actually reduce existing nuclear weapons arsenals to ZERO excepting only a few perhaps in the hands of some new, dedicated and international entity tasked with planetary protection only. That would necessarily require actual non-proliferation to new weapons powers like North Korea, Iran or anyone else. That would necessarily require addition of Israel to the planetary WMD consensus, which would necessarily require a better resolution to the conflict with Palestinians than expulsion from the occupied territories or genocide which is the current trajectory. This is at best a long-term project, but since the alternative is civilizational suicide I suggest the relevant parties begin soon. It took decades to get here so expect decades of work ahead to walk ever so carefully out of the death ground to which we have come.

² Most are familiar with Lord Acton's observation that power corrupts and that absolute power corrupts absolutely. At least as relevant for secret power systems like intelligence agencies and nuclear bureaucracies is: **"Everything secret degenerates, even the administration of justice; nothing is safe that does not show how it can bear discussion and publicity."** Found in a letter of January 23, 1861, published in *Lord Acton and his Circle*, Letter 74, edited by Abbot Gasquet, 1906. This suggests for this discussion that whatever institutions might be created to manage nuclear weapons for planetary protection should be far more transparent than bureaucracies ever want to be.

What about chemical and biological weapons, the other current WMDs, and exotic new weapons emerging like the cyber warfare crowd is working on? Here the history of arms control efforts is more encouraging. Despite many deaths and continuing chemical weapons arsenals, the long term international arms control regime appears to be working. Arsenals are declining (over 70% worldwide) By far the largest remaining are Russian and American, but both are being destroyed under careful international supervision. Dictators like Saddam Hussein who used them against neighbors at war (Iran) and even murdered ~ 5,000 of his own citizens in Halabja, Iraq on March 16, 1988 are now dead and their arsenals are really gone (38).

The Chemical Weapons Convention of 1997 created an Organization for the Prohibition of Chemical Weapons with a headquarters at The Hague, Netherlands with a good track record of surveillance and eventual intervention by state parties. So their utopian goal to “eliminate an entire category of weapons of mass destruction” using unique features like mandatory “challenge inspections” of suspect sites are worth considering in detail <http://www.opcw.org/chemical-weapons-convention/>. Once again, just because this group has a right under international law to inspect does not mean that countries like North Korea, Syria or Israel are actually going to allow inspectors access today, but the long term trends are positive. Meanwhile, the really big chemical weapons powers are actually destroying their arsenals as noted above, with rigorous observation by international parties that actually can look into any bunkers they want to. So an international consensus emerging after World War I in Europe, led to the Geneva Conventions, then the Chemical Weapons Convention, then to physical organizations staffed by real experts who are slowly accomplishing their goal of eradicating this class of WMD.

Biological weapons have killed far fewer people than either of the other categories, but are also more frightening than chemical weapons because in theory they could kill just about everyone. There is something about creating bugs that could kill everyone that seems to resonate more deeply with the moral core of scientists, soldiers and the people who support both, such that men who could order the deaths of millions by nuclear weapons (or bombs and bullets) are often morally offended by the idea of biological weapons. It may help that the scientists required are “life scientists” who generally get their Ph.D.’s after long dedication to life affirming things.

One oddity bears reflection. Five Americans were killed by weaponized anthrax in 2001, that appeared a week after the famous events of September 11. Dozens of others were wounded but not killed. Who exactly did this why remains in dispute, but there is little doubt that the anthrax came from the US biological weapons labs at USAMRIID (US Army Medical Research Institute of Infectious Diseases) in Fort Detrick, Maryland. Offensive weapons research at its predecessor US Army Biological Warfare Laboratories (USBWL) was officially shut down in 1969 anticipating ratification of the Biological Weapons Convention. But it is the same base, the same buildings, the same basic equipment and many of the same people were involved in both programs. Finally, “defensive research” which is allowed by the Convention requires some “offensive” biological agents to do the defensive research. So suspicion has never ended that other things may occur in such secret laboratories, as happened when the Soviets created tons of anthrax/smallpox “cocktail” weapons that should scare anyone. And that was 30 years ago. I am a geneticist; believe me, recombinant DNA and other methods have come a long way since then. So I say, never forget that these are all bureaucracies, ergo immoral, but that they are staffed by people who have actual consciences. Appeal to them and those so that the children may survive.

Works Cited

1. Oppenheimer, J. Robert. "The Atomic bomb made the prospect of future war unendurable. It has led us up those last few steps to the mountain pass; and beyond there is a different country." This was first cited in Richard Rhode's book "The Making of the Atomic Bomb" (Simon and Schuster, 1986) which says that Oppenheimer wrote it for a commencement address he gave in 1946.
2. Einstein, Albert. Letter to US President Franklin Roosevelt dated August 2, 1939, accessible at: <http://www.dannen.com/ae-fdr.html>
3. Russell, Bertrand and Albert Einstein. The Russell-Einstein Manifesto, issued in London on July 9, 1955. It was actually signed by 11 extremely distinguished scientists and thinkers, and ends with this sentence: "In view of the fact that in any future world war nuclear weapons will certainly be employed, and that such weapons threaten the continued existence of mankind, we urge the governments of the world to realize, and to acknowledge publicly, that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them." Accessible at <http://www.pugwash.org/about/manifesto.htm>
4. Kahn, Herman. On Thermonuclear War, Princeton University Press 1960, and Thinking About the Unthinkable, Horizon Press, 1968.
5. Rovner, Joshua. "After Proliferation: Deterrence Theory and Emerging Nuclear Powers" Ch. 2 in Strategy in the Second Nuclear Age: Power, Ambition and the Ultimate Weapon, Washington, DC: Georgetown University Press, 2012.
6. Goldman, Jan. "Ethics Phobia and the U.S. Intelligence Community: Just Say No," in Intelligence Ethics: the definitive work of 2007*, published by the Center for the Study of Intelligence and Wisdom at Ground Zero Minnesota, St. Paul, USA, 2007.
7. Cousins, Norman. The Pathology of Power, New York, NY: W.W. Norton Co, 1987.
8. Text of this nuclear Non-Proliferation Treaty (NPT) can be found on the UN website at: <http://www.un.org/en/conf/npt/2005/npttreaty.html>
9. West, Nigel. Historical Dictionary of Cold War Counterintelligence. Lanham, MD: Scarecrow Press, 2007.
10. Yoo, John and Robert Delahunty wrote several memos for the Bush Administration while working in the Office of Legal Counsel that radically rethought the importance of international law (and many then current U.S. domestic laws, like prohibitions of torture and much of the U.S. Constitution). One dated October 23, 2001 was a memorandum for the President's Counsel Alberto Gonzales and William Haynes II, General Counsel for the Department of Defense titled "Authority for Use of Military Force to Combat Terrorist Activities Within the United States" (underline theirs) and the other, dated January 9, 2002, titled "Application of Treaties and Laws to al Qaeda and Taliban Detainees" were especially controversial because they maintained that a U.S. President at war against unconventional enemies was basically unconstrained by any treaties or laws,

international or domestic. This supported the use of torture, kidnapping and deaths of many people in custody including some who in hindsight proved to be completely innocent of any crimes. These memos can be accessed at: <http://www.justice.gov/opa/documents/memomilitaryforcecombatus10232001.pdf> and http://upload.wikimedia.org/wikipedia/en/9/91/20020109_Yoo_Delahunty_Geneva_Convention_memo.pdf. Most of these memos have been repudiated by subsequent Offices of Legal Counsel or even by the U.S. Supreme Court in the case of Hamdan vs. Rumsfeld in 2006, but vast damage to our international reputation and intelligence liaison relationships had already been done.

11. Gill, Peter and Michael Andregg, editors. Special Issue on “Democratizing Intelligence” for Intelligence and National Security, in press 2013.
12. Jones, Ishmael (alias). The Human Factor: Inside the CIA’s Dysfunctional Intelligence Culture, New York, NY: Encounter Books, 2008, updated in 2010.
13. Anonymous (alias, a.k.a. Michael Scheuer). Imperial Hubris: Why the West is Losing the War on Terror, Dulles, VA: Brassey’s Inc., 2004.
14. Mahle, Melissa Boyle. Denial and Deception: An Insider’s View of the CIA from Iran-Contra to 9/11. New York, NY: Nation Books, 2004.
15. Sims, Jennifer and Burton Gerber, editors. Transforming U.S. Intelligence, Washington D.C.: Georgetown University Press, 2005.
16. Baer, Robert. Sleeping With the Devil: How Washington Sold Our Soul for Saudi Crude, New York, NY: Crown Publishers, 2003.
17. Andregg, Michael. “Do Intelligence Bureaucracies Fear Ethics, and If So, Why?” In the International Journal of Intelligence Ethics, Vol. 3, No. 2, Fall/Winter, 2012.
18. Stockwell, John. In Search of Enemies: A CIA story, New York, NY: W.W. Norton Co. 1978.
19. Marchetti, Vincent and John Marks. The CIA and the Cult of Intelligence, New York, NY: Dell Publishing, 1974.
20. Tenet, George, and Bill Harlow. At the Center of the Storm: My Years at the CIA, New York, NY: Harper Collins Books, 2007.
21. Odom, William E. Fixing Intelligence for a More Secure America, New Haven CT: Yale University Press, 1997.
22. Daugherty, William J. Executive Secrets: Covert Action and the Presidency, Lexington, KY: University Press of Kentucky, 2004.
23. Hulnick, Arthur S. Keeping us Safe: Secret Intelligence and Homeland Security, Westport CT: Praeger Publishers, 2004.
24. Crumpton, Henry A. The Art of Intelligence: Lessons Learned from a Life in the CIA’s Clandestine Service, New York, NY: Penguin Press, 2012.

25. Rodriguez, Jr., Jose A. and Bill Harlow. Hard Measures: How Aggressive CIA Actions After 9/11 Saved American Lives. New York, NY: Threshold Editions, 2012.
26. Rovner, Joshua. Fixing the Facts: National Security and the Politics of Intelligence, Ithaca, NY: Cornell University Press, 2011.
27. Steele, Robert David. On Intelligence: Spies and Secrecy in an Open World, Fairfax, VA: AFCEA International Press, 2000.
28. Johnson, Loch K. National Security Intelligence, Cambridge, UK: Polity Press, 2012.
29. Blum, William. The CIA: A Forgotten History. London, UK: Zed Books, 1986.
30. Herman, Edward and Gerry O'Sullivan. The "Terrorism" Industry. New York, NY: Random House, 1989.
31. Bamford, James. Body of Secrets: Anatomy of the Ultra-Secret National Security Agency. New York, NY: Random House, 2001.
32. Priest, Dana and William M. Arkin. "Top Secret America," a four part investigative effort of the Washington Post, whose first part was published July 19, 2010 titled "A Hidden World, growing out of control, followed by parts 2 (July 20) 3 (July 21) and part 4 titled "Monitoring America" published on Dec. 20, 2010. The whole can be found at: <http://projects.washingtonpost.com/top-secret-america/>
33. Rich, Frank. The Greatest Story Ever SOLD: The Decline and Fall of Truth in Bush's America. London, UK: Penguin Books, 2006
34. Weiner, Tim. Legacy of Ashes: The History of the CIA. New York, NY: Doubleday, 2007.
35. Tutu, Desmond. "Nuclear Weapons Must Be Eradicated," in The Guardian, UK, March 4, 2013.
36. Wilson, Valerie Plame. "An Idea Whose Time Has Come," in the Huffington Post, March 4, 2013, http://www.huffingtonpost.com/valerie-plame-wilson/global-zero-nuclear-weapons_b_2805744.html
37. Quigley, Carroll. The Evolution of Civilizations: An Introduction to Historical Analysis, New York, NY: Macmillan, 1961.
38. Simpson, John (World Affairs Editor, BBC News). "Halabja Chemical Weapons: A chance to find the men who armed Saddam," in BBC news magazine, Dec. 2, 2012, at: <http://www.bbc.co.uk/news/magazine-20553826>